of a lagophthalmos and a shallow corneal ulcer, corresponding to the side of the former operation, all his organs were in a normal state.

Hartley's operation was performed under chloroform anæsthesia. The patient's skull was very large, its thickness and the normal processes and depressions were all very strongly developed, a circumstance which is of practical importance, as it increases the facility with which the operation can be performed.

After the separation of an omega-shaped osteo-cutaneous flap the middle meningeal artery was found intact, and no trouble was encountered from it. As the convolutions and sulci of this brain were very strongly developed, the inner surface of the temporal fossa was correspondingly uneven, and, as the dura was intimately adherent, the stripping up necessary for the exposure of the Gasserian ganglion was not easy. An elevator had to be used here and there, until finally the foramen ovale was reached. Much cerebro-spinal fluid had escaped after the tearing of the dura, and hence the bottom of the cavity could be very well exposed by the aid of Hartley's lever.

In liberating the inframaxillary branch of the nerve, suddenly profuse venous hemorrhage was encountered, which was easily controlled by packing a small strip of iodoform gauze into the innermost angle of the cavity, but which recurred each time when the packing was removed. The cavity was therefore left with a packing of iodoform gauze in it, the flap returned, and an external dressing applied. The operation had lasted seventy minutes; toward the end the pulse had fallen from 78 to 40, and had become somewhat soft. During the next twenty-four hours the patient vomited twice, but otherwise he felt well, was fully conscious and without pain. On the first day after operation the patient was somewhat drowsy, and answered questions slowly but rationally. Pulse 84; temperature 100.2° F. Toward evening there was light delirium with some restlessness. Second day after operation he was more quiet; temperature 100.6° F.; respiration 22; pulse 96.

On the third day the patient was again chloroformed, the dressing, which was slightly soaked with blood and serum, was removed, the flap raised, and the packing extracted. The wound was healthy, the exposed surface of the brain was pale and entirely normal-looking. There was no hemorrhage of any amount at this time. The second branch of the nerve greatly attenuated, but clearly identified by its entrance into the round foramen, was secured by a silk ligature, likewise the third branch. Then the dural sheath enveloping the roots of these nerves was split with the knife, the distal ends of the nerves were divided, and an attempt was made to avulse the ganglion. This did not succeed as the nerves gave way, and the ganglion had to be removed in pieces with forceps and a small scalpel and scissors. The attenuation of the second branch might have been due to the earlier operations. A strip of iodoform was placed in the posterior angle of the wound, which was then sutured with catgut and dressed. At 8 P.M. temperature 102° F.; pulse 96. Patient slept fairly well. There was a gradual rise of temperature with remissions from the fourth day. On the sixth day after operation the pulse was as on the previous day, at times irregular, intermittent, and slow, while the temperature was 102° F. The patient was restless, at times delirious, but spoke perfectly clear and rational, and was free from pain. The dressings were removed, and a clean, sweet, and dry wound was

found, from the bottom of which, on removal of the deep packing, about a drachm of pale, entirely clear serum escaped. The brain was found still considerably retracted, its surface was pale and pulsating. Exploratory punctures revealed no abscess. The wound was closed and a traumatic encephalitis was assumed to be the explanation of the patient's condition. The temperature remained at 102° F., pulse varying above and below 50, and patient remained conscious to within fifteen minutes of his death, which occurred eight days after operation. The autopsy revealed no signs of meningitis. A focus of softening was found in the basal portion of the tempo-sphenoidal lobe, corresponding to the deepest part of the wound cavity and overlying the greater wing of the sphenoid, which involved the cortex and contained débris of brain-matter of the color of crushed strawberries.

The author draws the following conclusions: 1. That in certain individuals, on account of local peculiarities of the skull, Hartley's operation may be a very difficult undertaking. Hemorrhage may not only be an impediment to safe operation (Keen), but will also be dangerous, producing acute anæmia (shock). 2. Bruising of the brain-matter—be the pulpification due to direct mechanical injury or to local hemorrhage, or both—is a danger not to be slighted.

OTOLOGY.

UNDER THE CHARGE OF

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Teeth and Ears.

Barclay calls attention to earache from dental irritation in large children and in adults. In all cases of earache in which the tissues of the ear appear normal, oral irritation should be sought for, and if found removed.—*St. Louis Courier of Medicine*, September, 1895.

Otic Facial Paralysis.

Facial paralysis of the so-called rheumatic variety will be found generally associated with acute otitis media, if not caused by it (Gellé). This fact is illustrated in a case reported by Bundy (*Phila. Polyclinic*, Sept. 28, 1895). In all cases of supposed "rheumatic" facial palsy the ear should be carefully examined, and almost invariably the cause of the paralysis of the face will be found to lie in the middle ear.

Acute Otitis Media in Pneumonia.

Acute otitis media as a complication of pneumonia is described by Ball, and the attention of general physicians called to the fact that the symptoms caused by the ear disease are erroneously referred at times to brain disease.

(*Medical News*, September 21, 1895.) Of course no relief can be given to the patient suffering with the aural disease named until the ear can be examined with an otoscope, a correct diagnosis made, and paracentesis of the membrana tympani performed. Spontaneous evacuation of pus through the Eustachian tube in acute otitis media does not take place and cannot be relied upon for relief as Dr. Ball appears to think it could.

Antiseptic Drainage in Acute Otitis Media.

The beneficial results of antiseptic drainage of the acutely inflamed ear as set forth within the past year by Gradenigo and Pes, and by Lermoyez and Helme (see this JOURNAL, July, 1895, p. 104), are again set forth in recent articles by these investigators (*Annales des Maladies de l'Oreille*, vol. xxi. No. 7). After spontaneous rupture or after paracentesis of the membrane it is better to simply stop the meatus with a tuft of iodoform gauze and let it alone than to syringe or swab the ear. The streptococcus will thus escape without much risk of secondary infection of the drum-cavity from the external auditory canal by means of the staphylococcus.

Ear-massage.

Massage of the ear in various ways has been recommended by many aurists in catarrhal deafness, the object being to bring passive motion to act upon the membrana tympani and the ossicula. RANDALL has recently recommended "pneumatic massage by the finger tip in catarrhal deafness, as a substitute for so-called tragus pressure." (*Phila. Polyclinic*, September 28, 1895.) [For many years I have observed at times that patients had taught themselves to practice auto-massage by finger-tip suction in the meatus for the relief of catarrhal deafness with considerable success.]

Chronic Purulent Otitis Media.

KRETSCHMANN describes a form of chronic purulency of the middle ear in which the caries is located chiefly in the floor of the drum-cavity, in the so-called "*recessus hypotympanicus*." On account of the proximity of the bulb of the jugular and carotid canal this form of purulency in the ear becomes a dangerous one. (*Archiv f. Ohrenh.*, September, 1895.) Wolf, of Frankfurt-on-the-Main, proposes to treat this form of purulency by curetting with a sharp spoon the granulations usually accompanying this form of purulency of the middle ear. (Ibid.) Meier observed a case of suppurating thrombus of the bulb of the jugular and of the internal jugular with granulations of the hypotympanic recess. In the same case the mastoid cavity was found filled with granulations and pus, and communicating with it an extra-dural abscess. Incision into the transverse sinus and cerebellum gave no good results, death ensuing two days afterward. Panse and Leutert (Ibid.) maintain that reinfection of the cavities operated upon in and about the ear occurs through the Eustachian tube, and therefore the former proposes to cause the remnant of the membrana tympani to adhere to the promontory and thus cut off the passage-way from the tube to the drum-cavity. Leutert advocates the method now in vogue in Halle, viz., obliteration of

the tympanic mouth of the Eustachian tube.—*Archiv f. Ohrenheilk*, September, 1895.

In an article on the neglect of suppurative ear disease, ERSKINE (*Glasgow Medical Journal*, July, 1895) condemns postponement of treatment of suppuration of the ear, tamponing a running ear with cotton, the idea of its being dangerous to stop a discharge from the ear, the use of various nostra advertised for the cure of ear diseases, since there is "no panacea for ear diseases," and recommends that medical students be instructed in clinical otology, and that "the ear should always be examined in the early stage of the illnesses of infants and young children and in all infectious fevers and throat affections."

SEPTIC OTITIC SINUS-PHLEBITIS.

Septic sinus-phlebitis, from acute or subacute purulent otitis media, seems sometimes to occur and get well without the detection of pus in the mastoid antrum and cells, and without any surgical interference with the sinus or jugular vein, as in a case reported by ESKRIDGE (*Medical News*, October 5, 1895). [The path of septic invasion in such cases must be directly from the middle ear to the sinus by lymphatic and capillary veins.] It is worthy of note that septic phlebitis in the lateral sinus often occurs in connection with acute otitis media, as in three cases reported by Voss. Delay in operating is dangerous. But death may ensue even when an operation is performed promptly upon the sinus before grave symptoms arise, as in a case reported by him. In such cases a profound osteomyelitis sets in. Of five cases operated upon by Voss, two proved fatal, one occurring in chronic and one in acute purulent otitis media.—*Archiv f. Ohrenh.*, September, 1895. Bd. 39.

CEREBELLAR ABSCESS.

BACON reports a case of cerebellar abscess in a man, aged thirty-three years, the result of chronic suppuration in the right middle ear. Severe headache, especially on the left side, vomiting, intense vertigo on motion, staggering gait, a tendency to fall toward the *left*, paralysis of the right side of the face, peripheral in character, normal knee-jerks, and no difficulty of speech or swallowing, a pulse of 50 to 60 a minute, and a temperature of not more than 99.6° F. lead to the diagnosis of an abscess in the right side of the cerebellum. It was thought that the right optic disk was œdematous. The lateral sinus was therefore exposed by operation, but found to be normal. The cranial wall four inches behind the mastoid was then trephined, a disk 2 c.mm in diameter being removed. The abscess cavity was not reached, however. The patient died three weeks after the operation. Post-mortem examination revealed an abscess in the right cerebellar hemisphere 4.5 cm. long by 3 cm. wide, containing thick, fetid pus.—THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES, August, 1895.

OTITIC CEREBRAL ABSCESS.

According to OPPENHEIM (*Fortschritte der Medicin*, September 15, 1895), aphasia occurring in otitic abscess of the left temporal lobe is due to a lesion